

LOW VOLTAGE AVALANCHE DIODE

PRODUCT PREVIEW

FEATURES

- LOW ZENER NOISE SPECIFIED
- LOW ZENER IMPEDANCE
- LOW LEAKAGE CURRENT
- SOD323 PACKAGE

MAXIMUM RATINGS

- OPERATING TEMPERATURE: -55°C TO +150°C
- STORAGE TEMPERATURE: -55°C TO +150°C
- POWER: 200mW

ELECTRICAL CHARACTERISTICS PER LINE @ 25°C

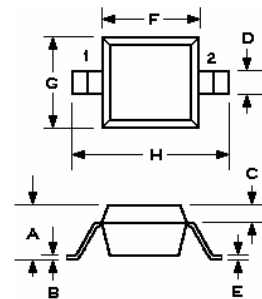
Unless otherwise specified

PART NUMBER (NOTE 1)	DEVICE MARKING	NOMINAL ZENER VOLTAGE $V_Z @ I_{ZT}$ VOLTS (NOTE 2)	TEST CURRENT I_{ZT} mAdc	MAX ZENER IMPEDANCE B-C D SUFFIX $Z_{2T} @ I_{ZT}$ OHMS (NOTE 3)	MAX. REVERSE LEAKAGE CURRENT			BCD SUFFIX MAXIMUM DC ZENER CURRENT I_{ZM} mAdc (NOTE 5)	BC D SUFFIX MAX. NOISE DENSITY AT $I_L=250 \mu A$ N_{60} (MICRO-VOLTS PER SQUARE ROOT CYCLE)	REGULATION FACTOR $\% V_Z$ VOLTS (NOTE 6)	LOW V_Z CURRENT I_L mAdc
					I_R (μ Adc) (NOTE 4)	V_R - VOLTS					
					I_R	NON & A SUFFIX	BCD SUFFIX				
MM3Z5518		3.3	20	26	5.0	0.9	1.0	57.5	0.5	0.90	20
MM3Z5519		3.6	20	24	3.0	0.9	1.0	52.5	0.5	0.90	20
MM3Z5520		3.9	20	22	1.0	0.9	1.0	48.0	0.5	0.85	20
MM3Z5521		4.3	20	18	3.0	1.0	1.5	43.0	0.5	0.75	20
MM3Z5522		4.7	10	22	2.0	1.5	2.0	40.5	0.5	0.60	10
MM3Z5523		5.1	5.0	26	2.0	2.0	2.5	37.5	0.5	0.65	0.25
MM3Z5524		5.6	3.0	30	2.0	3.0	3.5	34.0	1.0	0.30	0.25
MM3Z5525		6.2	1.0	30	1.0	4.5	5.0	30.5	1.0	0.20	0.01
MM3Z5526		6.8	1.0	30	1.0	5.5	6.2	28.0	1.0	0.10	0.01
MM3Z5527		7.5	1.0	35	0.5	6.0	6.8	25.5	2.0	0.05	0.01
MM3Z5528		8.2	1.0	40	0.5	6.5	7.5	23.0	4.0	0.05	0.01
MM3Z5529		9.1	1.0	45	0.1	7.0	8.2	21.0	4.0	0.05	0.01
MM3Z5530		10.0	1.0	60	0.05	8.0	9.1	19.0	4.0	0.10	0.01
MM3Z5531		11.0	1.0	80	0.05	9.0	9.9	17.5	5.0	0.20	0.01
MM3Z5532		12.0	1.0	90	0.05	9.5	10.8	16.0	10	0.20	0.01
MM3Z5533		13.0	1.0	90	0.01	10.5	11.7	14.5	15	0.20	0.01
MM3Z5534		14.0	1.0	100	0.01	11.5	12.6	13.5	20	0.20	0.01
MM3Z5535		15.0	1.0	100	0.01	12.5	13.5	12.5	20	0.20	0.01
MM3Z5536		16.0	1.0	100	0.01	13.0	14.4	12.0	20	0.20	0.01
MM3Z5537		17.0	1.0	100	0.01	14.0	15.3	11.0	20	0.20	0.01
MM3Z5538		18.0	1.0	100	0.01	15.0	16.2	10.5	20	0.20	0.01
MM3Z5539		19.0	1.0	100	0.01	16.0	17.1	10.0	20	0.20	0.01
MM3Z5540		20.0	1.0	100	0.01	17.0	18.0	9.5	20	0.20	0.01
MM3Z5541		22.0	1.0	100	0.0	18.0	19.8	8.5	20	0.20	0.01
MM3Z5542		24.0	1.0	100	0.01	20.0	21.6	8.0	20	0.30	0.01
MM3Z5543		25.0	1.0	100	0.01	21.0	22.4	7.5	20	0.35	0.01
MM3Z5544		28.0	1.0	100	0.01	23.0	25.2	7.0	20	0.40	0.01
MM3Z5545		30.0	1.0	100	0.01	24.0	27.0	6.5	20	0.45	0.01
MM3Z5546		33.0	1.0	100	0.01	28.0	29.7	6.0	20	0.50	0.01

SOD323 PACKAGE



PACKAGE DIMENSIONS

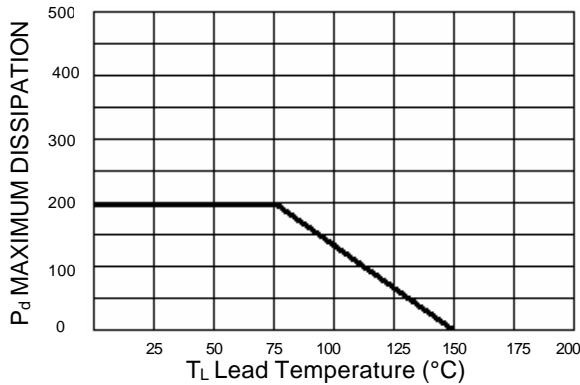


DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	-	.043	-	1.092
B	-	.004	-	.102
C	-	.006	-	.152
D	.010	.016	.254	.406
E	.003	.006	.076	.152
F	.063	.075	1.600	1.905
G	.045	.057	1.143	1.448
H	.094	.106	2.388	2.692

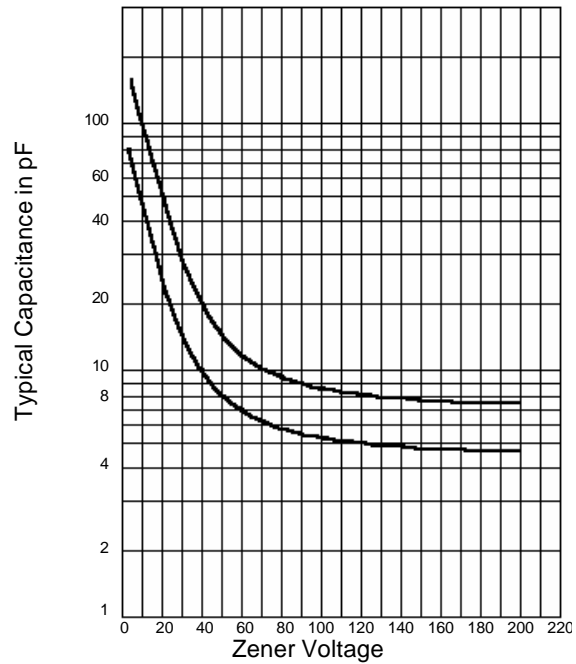
NOTES

1	TOLERANCE AND VOLTAGE DESIGNATION: The type part numbers shown are +/- 20 % with guaranteed limits for only V_Z , I_R and V_F . Units with A suffix are +/- 10% with guaranteed limits for only V_Z , I_R and V_F . Units with guaranteed limits for all six parameters are indicated by a B suffix for +/- 5.0% units. C suffix for +/- 2.0% and D suffix for +/- 1.0%.
2	ZENER (V_Z) VOLTAGE MEASUREMENT: Nominal zener voltage is measured with the device junction in thermal equilibrium with ambient temperature of 25°C at the specified current of I_{ZT} .
3	ZENER IMPEDANCE (Z_Z) DERIVATION: The zener impedance is derived from the 60 Hz voltage, which results when an ac current having an rms value equal to 10% of the dc zener current (I_{ZT}) is superimposed on I_{ZT} .
4	REVERSE LEAKAGE CURRENT (I_R): Reverse leakage current is guaranteed and measured at V_R as shown on the table.
5	MAXIMUM REGULATOR CURRENT (I_{ZM}): The maximum current shown is based on the maximum voltage of a 5.0% type unit; therefore, it applies only to the B C, or D suffix devices. The actual I_{ZM} for any devices may not exceed the value of 200 milliwatts divided by the actual V_Z of the device.
6	MAXIMUM REGULATION FACTOR ($\% V_Z$): $\% V_Z$ is the maximum difference between V_Z at I_{ZT} and V_Z at I_{ZL} measured with the device junction in thermal equilibrium.

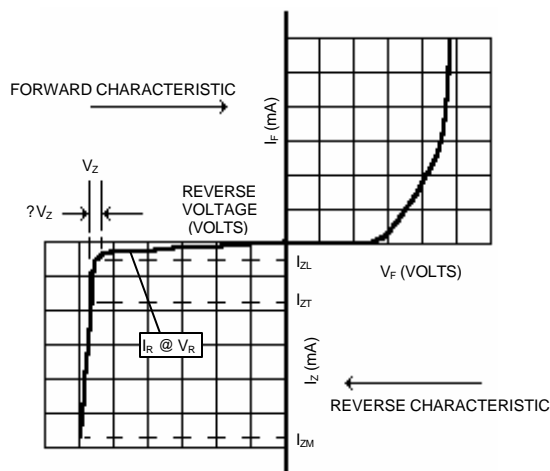
GRAPHS



POWER-TEMPERATURE DERATING CURVE



CAPACITANCE VS. ZENER VOLTAGE (TYPICAL)



ZENER DIODE CHARACTERISTICS AND SYMBOL IDENTIFICATION